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## Concordance Between Current Job and Usual Job in Occupational and Industry Groupings:

### Assessment of the 2010 National Health Interview Survey

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### Abstract

**Objective**—To determine whether current job is a reasonable surrogate for usual job.

**Methods**—Data from the 2010 National Health Interview Survey were utilized to determine concordance between current and usual jobs for workers employed within the past year. Concordance was quantitated by kappa values for both simple and detailed industry and occupational groups. Good agreement is considered to be present when kappa values exceed 60.

**Results**—Overall kappa values  $\pm$  standard errors were  $74.5 \pm 0.5$  for simple industry,  $72.4 \pm 0.5$  for detailed industry,  $76.3 \pm 0.4$  for simple occupation,  $73.7 \pm 0.5$  for detailed occupation, and  $80.4 \pm 0.6$  for very broad occupational class. Sixty-five of 73 detailed industry groups and 78 of 81 detailed occupation groups evaluated had good agreement between current and usual jobs.

**Conclusions**—Current job can often serve as a reliable surrogate for usual job in epidemiologic studies.

Many studies that examine the role of work in disease etiology rely on the industry and occupation (I&O) information found in medical and vital records to estimate exposures. For example, in all states the decedent's usual (ie, longest-held) I&O is required to be recorded on the death certificate and most cancer registries are also required to collect data on usual I&O.<sup>1,2</sup> Unfortunately, the I&O data available in these records are not well standardized. For example, I&O data are entered into the medical record through various administrative or clinically based mechanisms by physicians, nurses, admitting clerks, and other hospital personnel.<sup>3</sup> In addition, the purposes for collecting such information are often unrelated to identifying occupational exposures. When I&O data are present in the medical record, they may be incomplete, and from an uncertain time frame (ie, they may be the current and not usual I&O). For example, in a review of medical records containing I&O information from 758 cancer patients, only 5% included information indicating that the I&O reflected the patient's usual employment.<sup>3</sup> Likewise, the I&O data captured on a death certificate may also be from an uncertain time frame (ie, it may be the I&O at the time of death and not

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usual I&O). Furthermore, it is common for current job to be used as a surrogate for usual job in studies where only current job is available.<sup>4</sup>

Previously published research has shown the current I&O to be a reasonable surrogate for usual job based on high concordance between current job and usual job.<sup>4-6</sup> However, there are no recent data that have examined concordance on these jobs. In 1989, Burnett and Crouse<sup>5</sup> reported percent agreement between the I&O of respondents' current and usual jobs, using data from the 1980 National Health Interview Survey (NHIS) Occupational Supplement. In addition, Burnett and Crouse<sup>5</sup> cited four previous studies utilizing usual occupations from death certificate or cancer registry databases and linking those with most recent employment. They noted that agreement between current and usual occupation or industry ranged from 61% to 82% across those previous studies. These values were in line with their own findings, wherein agreement averaged 69.9% and 68.1% for men for I&O, respectively, and 70.3% and 70.5% for women, respectively. They found that the longer a worker was in a current job, the more likely that current job and usual job were in concordance. Notably, in a study on leukemia in telephone linemen, last and longest-held jobs were equivalent in 85% of workers.<sup>7</sup>

Gomez-Marin and colleagues<sup>4</sup> reported the level of agreement beyond that expected due solely to chance (Cohen kappa values) between self-reported current and usual jobs utilizing data from the 1988 NHIS Occupational Health Supplement and the 1986 "Longest Job Worked" Supplement. Among 49,000 workers, they found kappa values of greater than or equal to 50.0 for more than 70% of 13 broad occupational groups and a broader range of 9.2 to 92.7 concordance for 206 more detailed occupational groups. Despite this wide range, they concluded that current occupation could be used as a surrogate for longest-held job for many occupational subgroups because the majority of the 13 broad and 41 more refined occupational grouping categories showed moderate to high levels of agreement.

To provide an up-to-date assessment on concordance, this study utilized NHIS data collected in 2010 on more than 16,000 adults employed in the year prior to interview. The 2010 NHIS Occupational Health Supplement marked the first time since 1988 that data on the longest-held jobs of current workers had been collected by the NHIS. Results are presented for 20 simple and 78 detailed industry groups and for four broad, 22 simple, and 93 detailed occupational groups. This study has the potential for wide-ranging applicability, given that the NHIS is one of the major data collection programs of the National Center for Health Statistics (NCHS) and is used to generate nationally representative estimates of the health status and demographic characteristics of the civilian noninstitutionalized population of the United States.

## METHODS

The NHIS is a cross-sectional in-person household survey conducted continuously since 1957 by the NCHS, the Centers for Disease Control and Prevention, and is used to monitor the health of the nation. Data are collected on the civilian noninstitutionalized population of the United States and exclude persons in long-term care facilities (eg, nursing homes), correctional facilities, active-duty Armed Forces personnel (although civilian family

members are included), and US nationals residing in foreign countries.<sup>8,9</sup> The survey uses a multistage clustered sample design with an over-sampling of Black, Hispanic, and Asian persons. Black, Hispanic, and Asian adults aged 65 years or older are also over-sampled to complete the sample adult module, which, as described later, is one of the four main NHIS modules.

The NHIS questionnaire consists of two sets of questions: (1) a core set of questions that remain relatively unchanged from year to year and (2) supplemental questions that vary from year to year to collect data pertaining to current health issues of national importance. In 2010, the survey instrument had four main modules: household, family, sample child, and sample adult. The first two modules collected health and sociodemographic information on each member of each family residing within a sampled household. Within each family, additional information was collected from one randomly selected adult (the “sample adult”) aged 18 years or older and from the parent or guardian of one randomly selected child (the “sample child”) younger than 18 (if the family had children). In rare instances when a sample adult was physically or mentally unable to respond, proxy responses were accepted (< 1.5% of sample). Interviews were conducted in-person (some telephone follow-up is allowed) using computer-assisted personal interviewing. A total interview lasted, on average, about 1 hour. In 2010, NHIS interviews were conducted in 34,329 households, accounting for 89,976 persons in 35,177 families. The estimates presented in this article are based on data collected from current/recent workers among 27,157 sample adults. The household response rate was 79.5%, the conditional sample adult response rate (ie, the response rate for those sample adults identified as eligible) was 77.3%, and the final sample adult response rate (ie, the response rate that takes into account both the conditional sample adult response rate and the household/family response rate) was 60.8%.

Information regarding current and usual I&O of employment was obtained from core and Occupational Health Supplement questions included in the Sample Adult module. Demographic characteristics were obtained from questions asked in the Household and Family modules. Open-ended responses were obtained from each employed sample adult respondent regarding his or her industry (employer’s type of business) and occupation (employee’s type of work) for their current job and usual job. The current job was defined as their main job held in the week preceding interview, or, if not employed in the week preceding interview, their main job held in the 12 months preceding interview. The usual job was defined as the job that the respondent had held the longest, compared with all other jobs the respondent ever held. Specific questions used to collect this information included the following: “For whom did you work at your main job or business?”/“Thinking about the job you held the longest, for whom did you work? (Name of company, business, organization or employer),” “What kind of business or industry was this? (For example: TV and radio management, retail shoe store, State Department of Labor),” “What kind of work were you doing? (For example: farming, mail clerk, computer specialist.),” and “What were your most important activities on this job or business? (For example: sells cars, keeps account books, operates printing press.).” Respondents were also asked which of the following best described the job in question: “Employee of a private company for wages”; “A federal government employee”; “A state government employee”; “A local government employee”;

“Self-employed in own business, professional practice or farm”; or “Working without pay in a family-owned business or farm.”

These responses were reviewed by US Census Bureau coding specialists who assigned four-digit I&O codes. The data were coded using US Census codes on the basis of the 2007 North American Industrial Classification System and 2010 Standard Occupational Classification (SOC) system. To allow for more reliable estimates, NCHS recodes I&O Census codes into simple and detailed I&O groups. In addition, conventional broad US occupational categories were assigned for the current and usual jobs and were partitioned into “white-collar,” “service,” “farming, fishing & forestry,” and “blue-collar” as previously described.<sup>10</sup>

Race was stratified into White, Black, and Other. Other included American Indian, Asian, Alaska Native, race group not releasable and multiple race. Ethnicity was stratified into Hispanic and non-Hispanic.

The 2010 NHIS was approved by the Research Ethics Review Board of the NCHS (Protocol #2009-16) and the US Office of Management and Budget (Control #0920-0214). Written consent for participation in the 2010 NHIS was not received, but instead all 2010 NHIS respondents provided oral consent prior to participation.

## DATA ANALYSIS

To account for the complex sampling design of the NHIS, the 2010 data were analyzed using SAS 9.3 survey procedures and SUDAAN 11. The NHIS sample adult record weights provided by NCHS were also used in all analyses. Estimates based on cell sizes of 10 or fewer are not reported.

The kappa statistic ( $\kappa$ ) was used to measure agreement between current job and usual job and was presented as a percentage. Kappa is defined as “the agreement beyond chance divided by the amount of possible agreement beyond chance.”<sup>11</sup> We calculated concordance across all industry (or occupation) categories by deriving kappa values from  $n$  by  $n$  tables, where  $n$  is the number of categories that current and longest-held industry (or occupation) was divided into (eg, 20 for simple industry groups). We did not weight kappa values to take into account the “closeness” of the various industry (or occupation  $n$ ) categories. Because there is not a standard way to measure the “closeness” across all I/O categories, we presented unweighted kappa statistics. Nevertheless, we show the effects of the closeness of some of the detailed I/O categories by presenting results for both detailed and simple categories, where the simple categories lump together the “close” detailed categories.

To assess whether certain I/O categories had stronger concordance between current and usual jobs than other I/O categories, we also calculated concordance stratified by I/O categories. We did this by treating concordance between current industry (or occupation) and usual industry (or occupation) with regard to category  $x$  as a dichotomous variable. For example, we calculated agreement between whether the respondent’s current job was in the manufacturing industry category versus another industry category, and whether the respondent’s usual job was in the manufacturing industry category.

Finally, we stratified our analyses of overall I/O concordance and of simple I/O category-specific concordance by demographic factors, to assess whether there are demographic subgroups of workers for which the assumption that current job is a good surrogate for usual job is weaker than for other demographic subgroups.

Kappa values are rated on the following scale<sup>11</sup>:

- 93 to 100 = excellent agreement
- 81 to 92 = very good agreement
- 61 to 80 = good agreement
- 41 to 60 = fair agreement
- 21 to 40 = slight agreement
- 1 to 20 = poor agreement
- 0 = no agreement

Statistical significance was assessed by the *z* test at  $\alpha = 0.05$ . To correct for multiplicity when conducting multiple comparisons, the alpha value was obtained by dividing 0.05 by the number of comparisons. For example, statistical significance for race comparisons, White versus Black and White versus Other Race, was each tested at  $\alpha = 0.025$ .

Although the findings for the simple I&O groups were stratified by sex, race, and ethnicity, it was beyond the scope of this report to provide this stratification for the detailed I&O groups.

## RESULTS

Of the 27,157 sample adults who participated in the 2010 NHIS, 16,905 (62%) were included in the analysis of concordance by industry. Of these, 15,095 respondents had a job during the week prior to the survey, and 1810 did not have a job in the prior week but did work in the 12 months preceding interview. Sixteen of these current or recent workers were missing data for current and/or usual occupation, so the analyses by occupation categories are based on 16,889 sample adults. Excluded from all analyses were 10,252 (38%) sample adults. Of these, 7867 had no job in the last week or past 12 months, 1702 had never worked, and 64 had missing data for these items (past week or past 12 months). The remainder (619) had missing current and/or usual industry or were military.

Overall kappa values for simple I&O groups were indicative of good agreement ranging from  $74.5 \pm 0.5$  (industry) to  $76.3 \pm 0.4$  (occupation) (Table 1). Overall kappa values for detailed I&O groups were slightly lower ranging from  $72.4 \pm 0.5$  (industry) to  $73.7 \pm 0.5$  (occupation). On the contrary, the kappa value for broad occupational categories was higher ( $80.4 \pm 0.6$ ).

Overall kappa values for simple I&O groups were higher for men (industry:  $75.1 \pm 0.6$ ; occupation:  $77.0 \pm 0.6$ ) than for women (industry:  $72.9 \pm 0.7$ ; occupation:  $74.7 \pm 0.6$ ) (Table 2). The lowest kappa values were observed among those respondents with less than 1 year in

their current job and ranged from  $44.3 \pm 2.0$  for male industry listings to  $48.9 \pm 2.0$  for male occupational listings (Table 2). Nevertheless, these kappa values were indicative of fair agreement. In contrast, those with 21+ years in their current job had the highest kappa values indicating excellent agreement. Indeed, kappa values increased monotonically for both I&O by length of current employment. With respect to worker age, kappa values were relatively stable staying within the good agreement range for both men and women (Table 2). Nevertheless, kappa values were lowest among workers aged 65 years or older. The kappa values were similar between Whites, Blacks, and Other race and reflect good agreement.

Results for the simple industry groups are shown in descending order by kappa values in Table 3. The simple industry group with the highest kappa value was “Construction Industries” at  $82.0 \pm 1.1$ . For men, the highest kappa value was also found for “Construction Industries” at  $81.8 \pm 1.2$ , whereas for women it was for “Health Care and Social Assistance Industries” at  $78.4 \pm 0.9$ . The highest kappa value for Whites was for “Construction Industries” at  $82.1 \pm 1.2$ ; for Blacks, “Utilities” at  $91.3 \pm 4.7$ ; and for Other Race, “Transportation and Warehousing Industries” at  $90.5 \pm 3.0$ . For ethnicity, the simple industry group with the highest kappa value was “Construction Industries” for Hispanics at  $86.7 \pm 1.9$  and “Utilities” for non-Hispanics at  $80.8 \pm 3.4$ . The industry with the overall lowest kappa value was “Retail Trade Industries” at  $67.2 \pm 1.3$ .

Results for the simple occupation groups are shown in descending order by kappa values in Table 4. The simple occupational group with the highest kappa value was “Healthcare Practitioners and Technical Occupations” at  $85.8 \pm 1.0$ . For men, the highest kappa value was found for “Legal Occupations” at  $88.9 \pm 3.3$  whereas for women it was for “Architecture and Engineering Occupations” at  $87.8 \pm 3.1$ . The highest kappa value for Whites was “Healthcare Practitioners and Technical Occupations” at  $85.3 \pm 1.2$ ; for Blacks, “Legal Occupations” at  $87.7 \pm 6.2$ ; and for Other Race, “Healthcare Practitioners and Technical Occupations” at  $90.5 \pm 2.5$ . For Hispanics, the simple occupational group with the highest kappa value was “Construction and Extraction Occupations” at  $87.8 \pm 1.8$  and for non-Hispanics it was “Healthcare Practitioners and Technical Occupations” at  $85.7 \pm 1.1$ . The occupation with the overall lowest kappa value was “Sales and Related Occupations” at  $68.5 \pm 1.2$ .

The agreement between current and usual industry was statistically significantly higher for men versus women in three simple industry groups. Agreement was significantly lower for Whites versus Other Race in two simple industry groups. Agreement was significantly higher for Hispanics versus non-Hispanics in seven simple industry groups (Table 3).

For the simple occupation groups, the agreement between current and usual occupation was statistically significantly higher for men than for women in four occupation groups, and in one group it was higher for women than for men. There were no statistically significant differences for Whites versus Blacks. Nevertheless, Whites versus Other Race had significantly lower agreement in two occupation groups. Hispanics had significantly higher agreement than non-Hispanics in 10 occupation groups.



Results for the detailed groups of industries and occupations are shown in descending kappa values order in Tables 5 and 6, respectively. For industry, “Petroleum and coal products manufacturing” displayed the highest kappa value at  $85.8 \pm 6.6$  and “Textile mills” displayed the lowest kappa value at  $44.1 \pm 11.4$ . Of the 73 detailed industry groups with cell sizes more than 10, 65 had a kappa value of 61 or higher, suggesting good agreement between current and usual industry. For occupation, “Air transportation workers” had the highest reportable kappa value at  $89.8 \pm 4.8$  and the lowest reportable kappa value was for “Supervisors, transportation and material moving workers” at  $54.7 \pm 10.0$ . Of the 81 detailed occupation groups with cell sizes more than 10, 78 had a kappa value of 61 or higher.

Agreement by broad US occupational classification is shown in Table 7. Overall, agreement did not differ between blue-collar ( $83.1 \pm 0.7$ ) and white-collar ( $81.4 \pm 0.6$ ) workers ( $P > 0.0167$ ) but agreement was greater for blue-collar workers than for service workers or farming, fishing, and forestry workers ( $P < 0.0167$ ). In the farming, fishing, and forestry category, Hispanics tended to remain employed in this category whereas non-Hispanics seemed to change jobs (ie, non-Hispanics were more likely to have left employment in farming, fishing, and forestry, and were currently employed in another occupation). The age categorization shows that the majority of the movement out of farming, fishing, and forestry occurred in the 45- to 64-year age range (data not shown). It should be noted that the findings for farming, fishing, and forestry are based on small numbers compared with the other three categories.

## DISCUSSION

Using 2010 data, we found good concordance between I&O of workers’ current jobs and I&O of their usual jobs. This suggests that in most cases where detailed occupational histories are not available, current I&O are reasonable surrogates for usual I&O. As expected, overall concordance was higher for simple I&O categories than for more detailed I&O categories. The overall kappa statistic based on only four broad occupational categories approached the “very good” range.

The assumption that current I&O are reasonable surrogates for usual I&O does seem to be more strongly supported for some subgroups of workers than for others. That kappa values were among the lowest for workers in their most recent job for less than 1 year as compared to the near-perfect concordance for individuals who worked in their current jobs a minimum of 21 years is consistent with previous literature.<sup>5</sup> That is, both this study and previous studies found that the longer a worker was in a current job, the more likely that current job and usual job were in concordance. These results suggest that higher job tenure will minimize ascertainment bias when using current job as a surrogate for usual job. In contrast, age-related values of concordance were relatively stable staying within the good agreement range but declined to a low numerical value for 65+, which may be reflective of retirement from the usual job followed by acquisition of another job in a different I&O. Levels of agreement do not seem to differ much by worker race, but Hispanic workers seem to have higher concordance than non-Hispanic workers, both overall, and within several simple I&O categories.

Kappa values for the vast majority of simple and detailed I&O groups showed good agreement or better between current job and usual job. Our overall highest concordance estimates among the simple I&O groups (ie, Construction Industries; Healthcare Practitioners; and Technical Occupations) were of very good agreement, which is greater than the highest kappa value (ie,  $71.2 \pm 0.4$ , for professional specialty) found in a previous study of 13 broad occupational groups.<sup>4</sup> Unlike this study, which found no overall kappa for any simple I&O group to indicate slight agreement or worse (ie, kappa value of 40 or less), the Gomez-Marín et al.<sup>4</sup> study found one simple group (ie, “Handlers, equipment cleaners, helpers, laborers”) with slight agreement.<sup>4</sup> In this study, the simple I&O groups with the lowest overall kappa values (ie, “Retail Trade Industries” and “Sales and Related Occupations”) still showed good agreement. The higher concordance obtained using 2010 data may reflect a propensity for workers to stay within a particular industry/occupation rather than risk unemployment in a tighter job market than was present in the 1980s.

Several previous studies have found increased concordance for higher-paying jobs and decreased concordance for lower-paying jobs.<sup>4</sup> Although we did not assess income/salary in this study, those I&Os considered to have lower income/salary tended to have lower concordance than those I&Os traditionally considered to have higher income/salary. For example, “Health diagnosing and treating practitioners” and “Lawyers, judges, and related workers” were among the top with a kappa value of  $89.3 \pm 1.1$  and  $86.4 \pm 3.6$ , respectively, whereas at the bottom were groups such as “Printing workers” at  $59.2 \pm 7.3$  (Table 6). Further evidence of an association between pay and concordance is the lesser (albeit good) agreement for service workers and farming, fishing, and forestry workers as opposed to white- and blue-collar workers who displayed very good agreement.

## STRENGTHS AND LIMITATIONS

The results presented herein are robust in that they are derived from a relatively large data set that is nationally representative. Nevertheless, the results are limited in that they are based on a sample of one year of data collection and collected at a time when the country was recovering from a recession. Moreover, respondents did not provide a complete occupational history, and no effort was made to verify the accuracy of the self-reported usual job. Also, extrapolations to occupations and industries with an estimated population size of fewer than approximately 250,000 would not be reliable because of NHIS sample size limitations.

## CONCLUSIONS

This study provides the most recent assessment of the concordance between current I&O and usual I&O. Overall and for a vast majority of simple and detailed I&O groups, good or better agreement between current job and usual job was found, suggesting that current job is a reasonable surrogate for usual job in epidemiologic studies. Nevertheless, those with low tenure in their current job have substantially decreased concordance, suggesting the need for greater caution when using such low tenure employment as a surrogate for usual employment. Concordance was also relatively low for workers aged 65 years or older, whereas it was relatively high for Hispanic workers. Among major I&O groups, we found



consistently high concordance for industries and occupations related to health care and construction, but the lowest concordance for workers in both industries and occupations related to retail/sales. Given that these data were collected in 2010 when the nation was emerging from a recession, additional data are needed to confirm whether the observed patterns hold when the nation is under different economic conditions.

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**TABLE 1**

Overall Concordance of Industry and Occupation of Current Job and Usual Job for Workers Who Worked Within the Past 12 Months

Category	Classification Level (# of Categories)	$\kappa \pm \text{SE}$	95% CI for $\kappa$
Industry	Simple (20)	$74.5 \pm 0.5$	73.5–75.4
	Detailed (78)	$72.4 \pm 0.5$	71.4–73.3
Occupation	Simple (22)	$76.3 \pm 0.4$	75.4–77.2
	Detailed (93)	$73.7 \pm 0.5$	72.9–74.6
	Broad (4)	$80.4 \pm 0.6$	79.3–81.5

CI, confidence interval; SE, standard error.

Concordance for Simple Industry and Occupational Classifications Cross-tabulated Between Sex and Race, Age or Years in Most Recent Job for Workers Who Have Worked Within the Past 12 Months

TABLE 2

Group	Men				Women			
	Industry		Occupation		Industry		Occupation	
	n	$\kappa \pm SE$	n	$\kappa \pm SE$	n	$\kappa \pm SE$	n	$\kappa \pm SE$
Overall	8,124	75.1 $\pm$ 0.6	8,115	77.0 $\pm$ 0.6	8,781	72.9 $\pm$ 0.7	8,774	74.7 $\pm$ 0.6
Years in most recent job								
< 1	1,243	44.3 $\pm$ 2.0	1,242	48.9 $\pm$ 2.0	1,488	46.5 $\pm$ 1.8	1,488	48.2 $\pm$ 1.9
1–5	3,183	68.4 $\pm$ 1.0	3,176	70.6 $\pm$ 1.0	3,677	65.1 $\pm$ 1.1	3,674	67.7 $\pm$ 1.0
6–10	1,422	84.0 $\pm$ 1.3	1,419	85.5 $\pm$ 1.2	1,496	84.0 $\pm$ 1.2	1,493	86.5 $\pm$ 1.1
11–20	1,310	92.6 $\pm$ 0.9	1,309	93.2 $\pm$ 0.8	1,254	94.7 $\pm$ 0.8	1,250	95.5 $\pm$ 0.8
21+	946	98.4 $\pm$ 0.4	948	98.6 $\pm$ 0.4	847	99.0 $\pm$ 0.4	847	99.1 $\pm$ 0.4
Age, y								
18–29	1,888	75.1 $\pm$ 1.2	1,887	76.6 $\pm$ 1.2	2,062	70.3 $\pm$ 1.3	2,057	71.3 $\pm$ 1.3
30–44	2,876	76.4 $\pm$ 1.0	2,869	78.6 $\pm$ 1.0	2,878	74.7 $\pm$ 1.2	2,875	76.2 $\pm$ 1.0
45–64	2,894	75.3 $\pm$ 1.0	2,890	77.2 $\pm$ 1.0	3,350	73.4 $\pm$ 0.9	3,352	75.8 $\pm$ 0.9
65+	466	61.8 $\pm$ 2.8	469	64.6 $\pm$ 2.4	491	67.5 $\pm$ 2.6	490	71.8 $\pm$ 2.6
Race								
White	6,323	75.2 $\pm$ 0.7	6,322	77.1 $\pm$ 0.6	6,412	72.7 $\pm$ 0.7	6,408	74.6 $\pm$ 0.7
Black	1,037	72.1 $\pm$ 1.7	1,032	73.9 $\pm$ 1.6	1,549	71.8 $\pm$ 1.5	1,548	73.2 $\pm$ 1.5
Other*	764	77.3 $\pm$ 2.1	761	79.0 $\pm$ 2.1	820	76.2 $\pm$ 2.1	818	78.6 $\pm$ 2.0
Ethnicity								
Hispanic	1,739	80.0 $\pm$ 1.2	1,740	81.4 $\pm$ 1.2	1,602	80.3 $\pm$ 1.2	1,595	81.4 $\pm$ 1.2
Non-Hispanic	6,385	74.1 $\pm$ 0.7	6,375	76.1 $\pm$ 0.6	7,179	71.9 $\pm$ 0.7	7,179	73.8 $\pm$ 0.7

\* Other includes American Indian, Asian, Alaska Native, race group not releasable, and multiple race.

SE, standard error; y, years.

TABLE 3

Concordance of Current Job (CJ) and Usual Job (UJ) by Industry for Workers Who Worked Within the Past 12 Months: Simple List of Industries (NAICS Sector)

Industry	US Worker Estimated Population Size, CJ	Number of Workers			$\kappa \pm SE$	95% CI for $\kappa$	Significance
		CJ	UJ	CJ and UJ			
Construction industries (23)							
All	10,460,842	1,098	1,114	932	82.0 $\pm$ 1.1	79.8–84.3	
Male	9,490,442	987	997	845	81.8 $\pm$ 1.2	79.4–84.2	
Female	970,400	111	117	87	76.3 $\pm$ 3.7	68.9–83.6	
White	9,546,260	965	971	819	82.1 $\pm$ 1.2	79.8–84.5	
Black	567,597	82	86	68	82.3 $\pm$ 3.5	75.5–89.2	
Other race	346,985	51	57	45	77.8 $\pm$ 5.6	66.8–88.7	
Hispanic	2,387,741	334	345	305	86.7 $\pm$ 1.9	83.0–90.4	*
Non-Hispanic	8,073,101	764	769	627	80.6 $\pm$ 1.4	77.9–83.3	
Utilities industries (22)							
All	1,415,416	136	133	105	80.0 $\pm$ 3.2	73.8–86.3	
Male	1,202,611	114	103	87	81.5 $\pm$ 3.4	74.8–88.3	
Female	212,805	22	30	18	72.6 $\pm$ 7.6	57.7–87.6	
White	1,236,898	110	102	80	78.4 $\pm$ 3.7	71.2–85.6	
Black	109,148	17	21	17	91.3 $\pm$ 4.7	82.0–100.7	
Other race	–	–	–	–	–	–	
Hispanic	191,636	22	18	15	74.6 $\pm$ 9.5	56.0–93.2	
Non-Hispanic	1,223,780	114	115	90	80.8 $\pm$ 3.4	74.0–87.6	
Health care and social assistance industries (62)							
All	20,019,022	2,420	2,292	1,962	79.4 $\pm$ 0.8	77.8–81.0	
Male	3,617,066	389	356	291	75.6 $\pm$ 2.3	71.1–80.1	
Female	16,401,956	2,031	1,936	1,671	78.4 $\pm$ 0.9	76.6–80.3	
White	15,039,798	1,629	1,540	1,312	78.9 $\pm$ 1.0	77.0–80.8	†
Black	3,212,987	533	506	430	77.5 $\pm$ 1.9	73.7–81.3	
Other race	1,766,237	258	246	220	85.6 $\pm$ 2.1	81.5–89.7	
Hispanic	2,283,198	399	368	333	84.8 $\pm$ 1.7	81.5–88.2	*

Industry	US Worker Estimated Population Size, CJ	Number of Workers			κ ± SE	95% CI for κ	Significance
		CJ	UJ	CJ and UJ			
Non-Hispanic	17,735,824	2,021	1,924	1,629	78.6 ± 0.9	76.9–80.4	
Agriculture, forestry, fishing, and hunting industries (11)							
All	2,302,407	268	281	221	79.0 ± 2.6	73.8–84.1	
Male	1,586,261	176	183	146	81.5 ± 2.6	76.4–86.5	
Female	716,146	92	98	75	73.5 ± 5.7	62.1–84.8	
White	2,131,893	241	250	199	79.3 ± 2.8	73.8–84.9	
Black	89,071	15	16	12	70.2 ± 11.1	48.4–92.1	
Other race	–	–	–	–	–	–	
Hispanic	596,080	93	93	80	84.9 ± 3.7	77.7–92.2	
Non-Hispanic	1,706,327	175	188	141	76.9 ± 3.3	70.4–83.4	
Education services industries (61)							
All	15,196,620	1,674	1,536	1,286	78.4 ± 1.0	76.5–80.4	
Male	4,872,815	504	475	387	77.8 ± 1.7	74.4–81.2	
Female	10,323,805	1,170	1,061	899	78.3 ± 1.3	75.7–80.8	
White	12,582,125	1,275	1,161	983	79.0 ± 1.1	76.7–81.2	
Black	1,536,352	236	220	175	75.4 ± 2.8	69.9–81.0	
Other race	1,078,143	163	155	128	76.9 ± 3.8	69.5–84.3	
Hispanic	1,387,185	215	199	166	79.6 ± 2.7	74.2–84.9	
Non-Hispanic	13,809,435	1,459	1,337	1,120	78.3 ± 1.0	76.2–80.3	
Mining industries (21)							
All	710,969	74	73	55	76.2 ± 5.0	66.3–86.1	
Male	608,145	62	62	46	77.1 ± 5.5	66.4–87.9	
Female	–	–	–	–	–	–	
White	642,900	67	68	51	74.9 ± 5.6	63.9–85.8	
Black	–	–	–	–	–	–	
Other race	–	–	–	–	–	–	
Hispanic	131,362	17	14	11	69.6 ± 12.9	44.2–95.0	
Non-Hispanic	579,607	57	59	44	77.5 ± 5.0	67.7–87.4	
Transportation and warehousing industries (48–49)							
All	5,981,820	693	699	541	76.1 ± 1.6	72.9–79.3	

Industry	US Worker Estimated Population Size, CJ	Number of Workers				$\kappa \pm SE$	95% CI for $\kappa$	Significance
		CJ	UJ	CJ and UJ				
Male	4,462,826	494	482	380		75.4 $\pm$ 2.0	71.5–79.4	
Female	1,518,994	199	217	161		77.3 $\pm$ 2.8	71.7–82.8	
White	4,607,234	481	481	374		76.5 $\pm$ 2.0	72.6–80.3	†
Black	942,979	148	154	109		67.7 $\pm$ 3.8	60.3–75.1	
Other race	431,607	64	64	58		90.5 $\pm$ 3.0	84.6–96.4	
Hispanic	1,105,158	158	163	137		85.3 $\pm$ 2.6	80.2–90.4	*
Non-Hispanic	4,876,662	535	536	404		74.0 $\pm$ 1.9	70.2–77.8	
Other services (except public administration) industries (81)								
All	7,675,827	905	839	674		74.9 $\pm$ 1.6	71.8–77.9	
Male	3,429,640	375	366	285		74.2 $\pm$ 2.3	69.8–78.7	
Female	4,246,187	530	473	389		75.4 $\pm$ 2.0	71.4–79.4	
White	6,422,853	703	655	530		76.0 $\pm$ 1.6	72.8–79.3	
Black	700,492	118	108	82		68.0 $\pm$ 4.8	58.5–77.4	
Other race	552,482	84	76	62		70.2 $\pm$ 5.1	60.2–80.1	
Hispanic	1,371,291	231	222	198		86.5 $\pm$ 2.1	82.5–90.5	*
Non-Hispanic	6,304,536	674	617	476		72.3 $\pm$ 1.8	68.8–75.9	
Information industries (51)								
All	3,766,549	441	514	350		74.6 $\pm$ 2.0	70.5–78.6	
Male	2,232,803	246	266	194		75.2 $\pm$ 2.9	69.4–80.9	
Female	1,533,746	195	248	156		73.7 $\pm$ 2.8	68.2–79.2	
White	3,034,586	323	373	253		74.1 $\pm$ 2.5	69.2–79.0	
Black	421,035	64	81	51		72.4 $\pm$ 4.7	63.2–81.7	
Other race	310,928	54	60	46		82.2 $\pm$ 4.2	73.9–90.5	
Hispanic	459,772	68	72	55		81.1 $\pm$ 4.2	72.9–89.4	
Non-Hispanic	3,306,777	373	442	295		73.7 $\pm$ 2.2	69.4–78.1	
Professional, scientific, and technical services industries (54)								
All	10,267,761	1,121	1,028	819		74.1 $\pm$ 1.3	71.6–76.6	
Male	5,830,155	591	531	434		75.5 $\pm$ 1.7	72.1–79.0	
Female	4,437,606	530	497	385		72.3 $\pm$ 1.8	68.8–75.7	
White	8,518,655	848	768	611		73.7 $\pm$ 1.5	70.7–76.6	



Industry	US Worker Estimated Population Size, CJ	Number of Workers				$\kappa \pm SE$	95% CI for $\kappa$	Significance
		CJ	UJ	CJ and UJ				
Black	618,897	98	95	69		68.5 $\pm$ 4.5	59.6–77.4	
Other race	1,130,209	175	165	139		79.9 $\pm$ 2.7	74.6–85.3	
Hispanic	626,193	111	105	82		73.6 $\pm$ 4.5	64.8–82.4	
Non-Hispanic	9,641,568	1,010	923	737		74.0 $\pm$ 1.4	71.3–76.7	
Manufacturing industries (31–33)								
All	14,283,598	1,559	1,851	1,298		73.5 $\pm$ 1.0	71.4–75.5	
Male	10,202,720	1,034	1,200	863		73.5 $\pm$ 1.3	70.9–76.1	
Female	4,080,878	525	651	435		72.0 $\pm$ 1.8	68.5–75.5	
White	11,912,709	1,205	1,424	998		73.1 $\pm$ 1.1	70.9–75.3	
Black	1,213,348	191	252	164		72.4 $\pm$ 2.9	66.7–78.0	
Other race	1,157,541	163	175	136		78.0 $\pm$ 3.1	71.9–84.2	
Hispanic	2,121,872	331	365	281		77.7 $\pm$ 2.3	73.2–82.2	
Non-Hispanic	12,161,726	1,228	1,486	1,017		72.8 $\pm$ 1.2	70.5–75.0	
Finance and insurance industries (22)								
All	6,297,990	721	766	543		72.9 $\pm$ 1.5	69.8–75.9	$\ddagger$
Male	2,647,998	278	270	215		80.3 $\pm$ 2.1	76.2–84.5	
Female	3,649,992	443	496	328		67.6 $\pm$ 2.1	63.4–71.7	
White	5,184,071	555	602	423		72.9 $\pm$ 1.7	69.7–76.2	
Black	713,839	102	97	70		70.8 $\pm$ 4.5	62.0–79.7	
Other race	400,080	64	67	50		75.2 $\pm$ 4.8	65.7–84.6	
Hispanic	577,533	90	93	67		71.0 $\pm$ 4.4	62.3–79.6	
Non-Hispanic	5,720,457	631	673	476		73.0 $\pm$ 1.6	69.8–76.2	
Arts, entertainment, and recreation industries (71)								
All	3,378,823	381	368	278		72.8 $\pm$ 2.3	68.3–77.3	
Male	1,962,113	212	205	163		77.0 $\pm$ 2.9	71.2–82.7	$\ddagger$
Female	1,416,710	169	163	115		67.0 $\pm$ 3.7	59.8–74.2	
White	2,746,245	283	269	204		72.4 $\pm$ 2.7	67.1–77.6	
Black	384,763	56	64	46		76.2 $\pm$ 4.9	66.5–85.9	
Other race	247,815	42	35	28		71.7 $\pm$ 6.9	58.2–85.2	
Hispanic	361,955	55	50	41		74.9 $\pm$ 6.1	63.0–86.8	

Industry	US Worker Estimated Population Size, CJ	Number of Workers			κ ± SE	95% CI for κ	Significance
		CJ	UJ	CJ and UJ			
Non-Hispanic	3,016,868	326	318	237	72.6 ± 2.4	67.8–77.4	
Public administration industries (92)							
All	7,622,110	893	868	661	72.7 ± 1.5	69.7–75.6	
Male	3,946,959	415	426	319	73.1 ± 2.1	69.0–77.1	
Female	3,675,151	478	442	342	72.1 ± 2.2	67.9–76.4	
White	5,859,195	598	573	438	72.8 ± 1.8	69.2–76.4	
Black	1,246,905	218	216	164	72.2 ± 2.9	66.6–77.8	
Other race	516,010	77	79	59	71.2 ± 5.0	61.4–81.1	
Hispanic	808,520	116	110	89	76.8 ± 4.1	68.8–84.8	
Non-Hispanic	6,813,590	777	758	572	72.1 ± 1.6	69.0–75.3	
Accommodation and food services industries (72)							
All	10,580,732	1,203	1,383	965	71.7 ± 1.3	69.2–74.1	
Male	4,975,359	534	571	425	73.5 ± 2.0	69.6–77.4	
Female	5,605,373	669	812	540	70.0 ± 1.7	66.7–73.3	
White	8,544,766	916	1,057	737	72.0 ± 1.4	69.3–74.7	
Black	1,150,895	169	193	130	71.4 ± 3.3	64.9–77.9	
Other race	885,071	118	133	98	68.7 ± 5.3	58.3–79.1	
Hispanic	2,168,620	353	378	305	79.3 ± 2.1	75.3–83.4	*
Non-Hispanic	8,412,112	850	1,005	660	69.8 ± 1.5	66.8–72.7	
Wholesale trade industries (42)							
All	3,632,268	381	392	276	71.6 ± 2.3	67.1–76.1	
Male	2,683,990	265	264	196	74.1 ± 2.6	69.0–79.1	
Female	948,278	116	128	80	64.7 ± 4.6	55.7–73.7	
White	3,071,527	304	324	221	70.7 ± 2.6	65.7–75.7	
Black	261,196	39	39	28	69.4 ± 7.6	54.5–84.3	
Other race	299,545	38	29	27	83.5 ± 5.6	72.5–94.6	
Hispanic	567,738	79	83	64	76.6 ± 4.9	66.9–86.3	
Non-Hispanic	3,064,530	302	309	212	70.6 ± 2.5	65.7–75.5	
Management of companies and enterprises industries (55)							
All		–	–	–	–	–	

Industry	US Worker Estimated Population Size, CJ	Number of Workers			κ ± SE	95% CI for κ	Significance
		CJ	UJ	CJ and UJ			
Real estate and rental and leasing industries (53)							
All	2,865,254	338	313	233	69.6 ± 2.5	64.7–74.5	
Male	1,710,675	185	154	122	69.1 ± 3.6	62.0–76.3	
Female	1,154,579	153	159	111	70.3 ± 3.2	64.0–76.5	
White	2,486,657	272	250	187	69.0 ± 2.7	63.6–74.3	
Black	229,852	43	41	29	71.9 ± 6.2	59.7–84.1	
Other race	148,745	23	22	17	76.7 ± 6.9	63.1–90.3	
Hispanic	396,018	69	61	53	78.3 ± 4.8	68.8–87.7	
Non-Hispanic	2,469,236	269	252	180	68.3 ± 2.8	62.8–73.8	
Administrative and support and waste management and remediation services industries (56)							
All	6,700,107	821	668	520	69.0 ± 1.7	65.6–72.4	
Male	4,010,913	441	360	291	72.6 ± 2.2	68.2–77.0	‡
Female	2,689,194	380	308	229	63.6 ± 2.6	58.5–68.8	
White	5,207,217	593	490	382	70.0 ± 1.9	66.3–73.7	
Black	1,219,889	188	139	112	66.1 ± 3.6	59.0–73.2	
Other race	273,001	40	39	26	61.0 ± 7.4	46.5–75.5	
Hispanic	1,735,362	261	233	199	79.6 ± 2.6	74.5–84.7	*
Non-Hispanic	4,964,745	560	435	321	65.0 ± 2.1	60.8–69.2	
Retail trade industries (44–45)							
All	16,938,550	1,768	1,775	1,256	67.2 ± 1.3	64.7–69.7	
Male	8,526,356	817	847	593	68.0 ± 1.8	64.5–71.4	
Female	8,412,194	951	928	663	66.4 ± 1.6	63.2–69.6	
White	13,756,502	1,358	1,367	963	66.7 ± 1.3	64.1–69.4	
Black	2,013,323	264	255	181	68.0 ± 2.9	62.4–73.6	
Other race	1,168,725	146	153	112	71.7 ± 4.9	62.2–81.3	
Hispanic	2,162,122	337	366	273	76.5 ± 2.2	72.1–80.8	*
Non-Hispanic	14,776,428	1,431	1,409	983	65.8 ± 1.4	63.1–68.4	

Ellipses show that estimates based on cell sizes of 10 or fewer are not shown.

\* Hispanic vs non-Hispanic,  $P = .05$ .

<sup>‡</sup> White vs Other,  $P = .025$ .

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<sup>†</sup>Male vs female, *P* = .05.

CI, confidence interval; CJ, the number of workers whose main job corresponded to the specified industry in the week preceding interview or, if not employed in the week preceding interview, whose main job held in the 12 months preceding interview corresponded to that industry; NAICS, North American Industrial Classification System; SE, standard error; UI, the number of workers who reported that industry for their usual job; CJ and UI, the number of workers with the specified industry as their current and usual jobs.

Concordance of Current Job (CJ) and Usual Job (UJ) by Occupation for Workers Who Worked Within the Past 12 Months: Simple List of Occupations (SOC Major Group)

TABLE 4

Occupation	US Worker Estimated Population, Size, CJ	Number of Workers			κ ± SE	95% CI for κ	Significance
		CJ	UJ	CJ and UJ			
Healthcare practitioners and technical occupations (29)							
All	7,242,083	849	820	730	85.8 ± 1.0	83.8–87.8	
Male	1,746,274	185	172	158	86.6 ± 2.1	82.4–90.9	
Female	5,495,809	664	648	572	85.2 ± 1.2	82.8–87.6	
White	5,593,118	603	585	515	85.3 ± 1.2	83.0–87.6	
Black	673,116	105	99	86	82.6 ± 4.0	74.8–90.4	
Other race	975,849	141	136	129	90.5 ± 2.5	85.5–95.5	
Hispanic	453,985	71	68	59	85.7 ± 3.7	78.5–93.0	
Non-Hispanic	6,788,098	778	752	671	85.7 ± 1.1	83.6–87.9	
Computer and mathematical occupations (15)							
All	4,105,887	454	456	384	84.1 ± 1.6	80.9–87.2	
Male	2,998,199	319	310	268	84.8 ± 2.0	80.9–88.7	
Female	1,107,688	135	146	116	81.9 ± 2.7	76.6–87.3	
White	3,175,985	308	300	254	84.0 ± 1.8	80.4–87.6	
Black	225,866	34	43	29	71.8 ± 6.7	58.6–85.0	
Other race	704,036	112	113	101	88.8 ± 2.3	84.2–93.3	
Hispanic	283,467	46	45	38	82.2 ± 5.6	71.2–93.2	
Non-Hispanic	3,822,420	408	411	346	84.2 ± 1.6	80.9–87.4	
Construction and extraction occupations (47)							
All	8,538,182	890	902	765	84.0 ± 1.3	81.6–86.5	
Male	8,353,506	867	873	747	83.5 ± 1.3	80.9–86.1	
Female	184,676	23	29	18	71.8 ± 8.3	55.5–88.1	
White	7,716,117	773	777	669	84.6 ± 1.3	82.0–87.3	
Black	530,084	74	75	57	77.9 ± 4.2	69.7–86.1	
Other race	291,981	43	50	39	79.3 ± 5.4	68.7–89.9	
Hispanic	2,266,716	320	324	290	87.8 ± 1.8	84.2–91.4	*

Occupation	US Worker Estimated Population, Size, C <sub>J</sub>	Number of Workers				$\kappa \pm SE$	95% CI for $\kappa$	Significance
		C <sub>J</sub>	U <sub>J</sub>	C <sub>J</sub> and U <sub>J</sub>				
Non-Hispanic	6,271,466	570	578	475		82.6 $\pm$ 1.6	79.6–85.7	
Architecture and engineering occupations (17)								
All	2,925,142	295	297	247		83.5 $\pm$ 1.9	79.7–87.3	
Male	2,415,039	234	226	189		82.3 $\pm$ 2.2	77.9–86.7	
Female	510,103	61	71	58		87.8 $\pm$ 3.1	81.7–93.9	
White	2,440,174	224	222	185		83.6 $\pm$ 2.2	79.2–88.0	
Black	123,543	17	18	15		86.3 $\pm$ 6.9	72.7–100.0	
Other race	361,425	54	57	47		81.6 $\pm$ 4.5	72.8–90.5	
Hispanic	195,715	23	18	15		75.8 $\pm$ 6.4	63.3–88.3	
Non-Hispanic	2,729,427	272	279	232		84.0 $\pm$ 2.0	80.1–87.9	
Legal occupations (23)								
All	1,789,351	191	183	154		82.4 $\pm$ 2.4	77.6–87.2	$\dagger$
Male	899,211	87	82	75		88.9 $\pm$ 3.3	82.4–95.4	
Female	890,140	104	101	79		76.3 $\pm$ 3.8	68.7–83.8	
White	1,596,622	158	155	128		82.0 $\pm$ 2.7	76.8–87.3	
Black	104,516	20	16	15		87.7 $\pm$ 6.2	75.6–99.9	
Other race	88,213	13	12	11		82.7 $\pm$ 9.8	63.4–102.0	
Hispanic	–	–	–	–		–	–	
Non-Hispanic	1,717,941	179	172	146		82.6 $\pm$ 2.5	77.6–87.5	
Education, training, and library occupations (25)								
All	10,324,017	1,113	1,046	889		81.2 $\pm$ 1.1	78.9–83.4	
Male	2,830,957	296	291	242		81.4 $\pm$ 2.2	77.1–85.6	
Female	7,493,060	817	755	647		80.7 $\pm$ 1.4	77.8–83.5	
White	8,752,677	872	815	694		81.4 $\pm$ 1.2	78.9–83.8	
Black	918,969	139	138	111		79.9 $\pm$ 3.5	73.0–86.8	
Other race	652,371	102	93	84		80.6 $\pm$ 4.3	72.1–89.0	
Hispanic	863,730	125	118	103		85.5 $\pm$ 2.8	80.0–91.1	
Non-Hispanic	9,460,287	988	928	786		80.7 $\pm$ 1.2	78.4–83.0	
Life, physical, and social science occupations (19)								
All	1,679,421	178	188	146		80.7 $\pm$ 2.6	75.7–85.8	



Occupation	US Worker Estimated Population, Size, C/J	Number of Workers				κ ± SE	95% CI for κ	Significance
		C/J	UJ	CJ and UJ				
Male	816,268	82	91	73	87.2 ± 2.9	81.4–93.0	†	
Female	863,153	96	97	73	74.4 ± 4.3	65.9–83.0		
White	1,459,516	137	143	115	82.0 ± 2.8	76.6–87.5		
Black	–	–	–	–	–	–		
Other race	185,669	33	37	27	75.9 ± 6.6	62.9–88.9		
Hispanic	127,970	17	14	13	85.0 ± 8.2	68.8–101.2		
Non-Hispanic	1,551,451	161	174	133	80.4 ± 2.7	75.1–85.8		
Arts, design, entertainment, sports and media occupations (27)								
All	3,187,843	371	392	306	79.5 ± 1.9	75.7–83.3		
Male	1,672,960	183	204	156	79.4 ± 2.6	74.3–84.6		
Female	1,514,883	188	188	150	79.6 ± 2.7	74.2–85.0		
White	2,832,214	306	315	247	80.1 ± 2.1	76.0–84.2		
Black	183,185	30	32	25	75.7 ± 6.9	62.0–89.3		
Other race	172,444	35	45	34	75.3 ± 7.7	60.2–90.3		
Hispanic	244,947	43	46	34	77.9 ± 5.7	66.8–89.1		
Non-Hispanic	2,942,896	328	346	272	79.6 ± 2.1	75.6–83.7		
Transportation and material moving occupations (53)								
All	8,445,084	947	913	730	77.7 ± 1.2	75.3–80.2		
Male	7,095,450	764	730	587	76.6 ± 1.4	74.0–79.3		
Female	1,349,634	183	183	143	79.8 ± 2.9	74.2–85.5		
White	6,526,005	670	664	517	77.3 ± 1.5	74.3–80.2		
Black	1,539,825	220	197	167	79.3 ± 2.6	74.2–84.3		
Other race	379,254	57	52	46	78.5 ± 5.7	67.3–89.7		
Hispanic	1,798,550	264	250	217	84.1 ± 2.1	80.0–88.2	*	
Non-Hispanic	6,646,534	683	663	513	76.0 ± 1.5	73.1–79.0		
Community and social services occupations (21)								
All	2,708,642	324	292	239	76.9 ± 2.3	72.4–81.4		
Male	1,063,437	101	93	75	77.4 ± 3.6	70.4–84.5		
Female	1,645,205	223	199	164	76.5 ± 2.8	71.0–82.0		
White	2,065,110	222	212	169	77.1 ± 2.6	71.9–82.3		

Occupation	US Worker Estimated Population, Size, C <sub>J</sub>	Number of Workers				$\kappa \pm SE$	95% CI for $\kappa$	Significance
		C <sub>J</sub>	U <sub>J</sub>	CJ and UJ				
Black	450,761	73	57	49	74.7 $\pm$ 5.7	63.5–85.9		
Other race	192,771	29	23	21	79.1 $\pm$ 7.6	64.1–94.1		
Hispanic	309,961	51	43	40	87.2 $\pm$ 4.2	78.9–95.6		*
Non-Hispanic	2,398,681	273	249	199	75.6 $\pm$ 2.5	70.7–80.5		
Management occupations (11)								
All	14,068,971	1,466	1,562	1,178	76.4 $\pm$ 1.1	74.3–78.5		
Male	8,880,591	864	876	702	79.0 $\pm$ 1.3	76.5–81.4		
Female	5,188,380	602	686	476	72.2 $\pm$ 1.6	68.9–75.4		
White	12,180,154	1,207	1,300	972	76.2 $\pm$ 1.1	74.0–78.4		
Black	1,005,257	144	138	108	76.4 $\pm$ 3.7	69.1–83.7		
Other race	883,560	115	124	98	77.8 $\pm$ 4.2	69.5–86.1		
Hispanic	930,781	153	169	131	78.5 $\pm$ 3.4	71.7–85.2		
Non-Hispanic	13,138,190	1,313	1,393	1,047	76.1 $\pm$ 1.1	73.9–78.3		
Building and grounds cleaning and maintenance occupations (37)								
All	5,872,450	747	686	564	75.9 $\pm$ 1.7	72.5–79.3		
Male	3,470,647	380	349	286	75.8 $\pm$ 2.5	70.8–80.8		
Female	2,401,803	367	337	278	75.9 $\pm$ 2.3	71.4–80.5		
White	4,688,859	554	514	428	77.3 $\pm$ 1.9	73.6–81.0		
Black	909,607	148	135	105	71.9 $\pm$ 3.8	64.3–79.4		
Other Race	273,984	45	37	31	64.8 $\pm$ 10.1	45.1–84.6		
Hispanic	2,084,482	329	313	280	86.0 $\pm$ 1.8	82.4–89.6		*
Non-Hispanic	3,787,968	418	373	284	70.0 $\pm$ 2.4	65.3–74.8		
Installation, maintenance, and repair occupations (49)								
All	5,184,903	552	544	431	75.6 $\pm$ 1.8	72.1–79.1		
Male	4,981,763	521	511	405	74.7 $\pm$ 1.9	71.0–78.3		
Female	203,140	31	33	26	80.3 $\pm$ 7.0	66.6–94.0		
White	4,550,189	452	445	352	76.1 $\pm$ 1.9	72.3–79.9		
Black	400,849	62	64	50	71.3 $\pm$ 6.4	58.6–83.9		
Other race	233,865	38	35	29	74.2 $\pm$ 6.8	60.8–87.7		
Hispanic	912,785	126	118	104	79.1 $\pm$ 3.7	71.9–86.3		

Occupation	US Worker Estimated Population, Size, C <sub>J</sub>	Number of Workers				$\kappa \pm SE$	95% CI for $\kappa$	Significance
		C <sub>J</sub>	U <sub>J</sub>	CJ and UJ				
Non-Hispanic	4,272,118	426	426	327		74.9 $\pm$ 2.0	71.0–78.9	
Protective service occupations (33)								
All	2,909,609	343	319	248		74.9 $\pm$ 2.3	70.3–79.4	
Male	2,264,142	248	232	186		76.5 $\pm$ 2.7	71.1–81.8	
Female	645,467	95	87	62		68.5 $\pm$ 4.4	59.8–77.2	
White	2,205,474	225	214	166		75.4 $\pm$ 2.6	70.3–80.5	
Black	521,622	96	86	68		75.9 $\pm$ 3.6	68.9–83.0	
Other race	182,513	22	19	14		64.3 $\pm$ 10.8	43.0–85.6	
Hispanic	443,822	55	57	45		79.9 $\pm$ 5.1	69.9–89.9	
Non-Hispanic	2,465,787	288	262	203		73.9 $\pm$ 2.4	69.1–78.7	
Healthcare support occupations (31)								
All	3,785,020	480	458	358		74.3 $\pm$ 1.9	70.6–78.1	
Male	450,868	48	45	31		66.2 $\pm$ 6.6	53.2–79.2	
Female	3,334,152	432	413	327		75.0 $\pm$ 2.0	71.0–79.0	
White	2,840,717	307	282	219		73.2 $\pm$ 2.4	68.4–77.9	$\ddagger$
Black	748,316	142	151	115		74.6 $\pm$ 3.7	67.4–81.9	
Other race	195,987	31	25	24		88.6 $\pm$ 4.5	79.7–97.6	
Hispanic	599,506	108	98	83		81.2 $\pm$ 3.5	74.3–88.2	
Non-Hispanic	3,185,514	372	360	275		73.1 $\pm$ 2.2	68.7–77.5	
Production occupations (51)								
All	8,967,035	1,032	1,184	851		74.3 $\pm$ 1.2	71.8–76.7	
Male	6,098,040	644	741	530		73.6 $\pm$ 1.6	70.4–76.7	
Female	2,868,995	388	443	321		75.1 $\pm$ 2.1	71.1–79.2	
White	7,280,826	781	875	638		74.5 $\pm$ 1.4	71.7–77.3	
Black	981,338	160	211	134		68.1 $\pm$ 3.3	61.6–74.5	
Other race	704,871	91	98	79		81.6 $\pm$ 3.9	74.0–89.3	
Hispanic	1,679,192	278	297	244		82.6 $\pm$ 2.3	78.1–87.0	*
Non-Hispanic	7,287,843	754	887	607		72.4 $\pm$ 1.4	69.6–75.3	
Office and administrative support occupations (43)								
All	20,114,739	2,357	2,346	1,825		73.7 $\pm$ 0.9	71.9–75.6	

Occupation	US Worker	Number of Workers				95% CI for $\kappa$	Significance
	Estimated Population, Size, C/J	C/J	UJ	CJ and UJ			
Male	5,222,907	542	548	390	69.1 $\pm$ 1.9	65.4–72.8	$\ddagger$
Female	14,891,832	1,815	1,798	1,435	74.1 $\pm$ 1.1	71.9–76.2	
White	15,810,509	1,710	1,679	1,319	73.8 $\pm$ 1.1	71.7–75.8	
Black	2,970,364	456	466	354	73.0 $\pm$ 2.1	68.9–77.0	
Other race	1,333,866	191	201	152	74.2 $\pm$ 3.5	67.2–81.1	
Hispanic	2,626,902	415	426	349	80.9 $\pm$ 1.7	77.5–84.3	*
Non-Hispanic	17,487,837	1,942	1,920	1,476	72.6 $\pm$ 1.0	70.6–74.7	
Food preparation and serving related occupations (35)							
All	8,711,944	983	1,078	780	73.2 $\pm$ 1.4	70.3–76.0	
Male	3,755,610	414	439	335	74.8 $\pm$ 2.1	70.6–79.0	
Female	4,956,334	569	639	445	71.9 $\pm$ 1.9	68.1–75.7	
White	7,000,498	741	817	591	73.2 $\pm$ 1.7	69.9–76.4	
Black	1,027,596	149	160	111	70.9 $\pm$ 3.8	63.4–78.4	
Other race	683,850	93	101	78	77.0 $\pm$ 4.3	68.5–85.5	
Hispanic	1,745,458	280	292	242	79.6 $\pm$ 2.6	74.4–84.7	*
Non-Hispanic	6,966,486	703	786	538	71.6 $\pm$ 1.7	68.2–75.0	
Business and financial operations occupations (13)							
All	6,899,798	803	736	572	72.9 $\pm$ 1.5	70.0–75.8	
Male	3,168,929	356	306	256	75.8 $\pm$ 2.1	71.6–80.0	
Female	3,730,869	447	430	316	70.4 $\pm$ 2.1	66.3–74.5	
White	5,622,008	591	549	427	73.7 $\pm$ 1.7	70.3–77.0	
Black	633,515	109	103	75	65.1 $\pm$ 4.8	55.8–74.5	
Other race	644,275	103	84	70	74.3 $\pm$ 4.2	66.1–82.5	
Hispanic	552,948	88	84	60	63.7 $\pm$ 5.1	53.6–73.8	
Non-Hispanic	6,346,850	715	652	512	73.7 $\pm$ 1.5	70.7–76.7	
Personal care and service occupations (39)							
All	5,667,830	664	607	478	72.0 $\pm$ 2.0	68.1–75.8	
Male	1,193,260	133	116	92	71.5 $\pm$ 4.3	63.1–79.9	
Female	4,474,570	531	491	386	71.6 $\pm$ 2.2	67.3–76.0	
White	4,157,226	440	408	318	71.3 $\pm$ 2.4	66.7–75.9	

Occupation	US Worker Estimated Population, Size, CJ	Number of Workers				$\kappa \pm SE$	95% CI for $\kappa$	Significance
		CJ	UJ	CJ and UJ				
Black	973,992	155	134	109	74.0 $\pm$ 3.8	66.4–81.5		
Other race	536,612	69	65	51	73.6 $\pm$ 5.6	62.6–84.7		
Hispanic	753,199	139	136	115	84.3 $\pm$ 2.8	78.8–89.8		*
Non-Hispanic	4,914,631	525	471	363	70.0 $\pm$ 2.2	65.7–74.4		
Farming, fishing, and forestry occupations (45)								
All	1,047,584	135	153	109	71.5 $\pm$ 4.5	62.6–80.4		
Male	711,052	83	90	63	72.2 $\pm$ 4.9	62.6–81.9		
Female	336,532	52	63	46	70.1 $\pm$ 8.8	52.9–87.4		
White	910,096	117	132	95	71.8 $\pm$ 4.7	62.6–81.0		
Black	–	–	–	–	–	–		
Other race	–	–	–	–	–	–		
Hispanic	471,453	77	83	68	82.6 $\pm$ 4.2	74.3–90.9		*
Non-Hispanic	576,131	58	70	41	62.7 $\pm$ 6.8	49.4–76.0		
Sales and related occupations (41)								
All	15,859,014	1,715	1,727	1,249	68.5 $\pm$ 1.2	66.2–70.8		
Male	7,862,454	764	790	580	70.8 $\pm$ 1.7	67.4–74.1		<sup>†</sup>
Female	7,996,560	951	937	669	66.2 $\pm$ 1.6	63.1–69.3		
White	13,176,996	1,332	1,327	958	67.4 $\pm$ 1.3	64.8–70.0		<sup>‡</sup>
Black	1,573,757	230	240	168	70.2 $\pm$ 2.9	64.5–75.9		
Other race	1,108,261	153	160	123	78.9 $\pm$ 3.5	72.1–85.7		
Hispanic	1,997,217	315	325	251	75.7 $\pm$ 2.3	71.2–80.3		*
Non-Hispanic	13,861,797	1,400	1,402	998	67.4 $\pm$ 1.2	65.0–69.9		

Ellipses shows that estimates based on cell sizes of 10 or fewer are not shown.

\* Hispanic vs non-Hispanic,  $P = .05$ .

<sup>†</sup> Male vs female,  $P = .05$ .

<sup>‡</sup> White vs Other,  $P = .025$ .

CI, confidence interval; SOC, Standard Occupational Classification; CJ, the number of workers whose main job corresponded to the specified occupation in the week preceding interview or, if not employed in the week preceding interview, whose main job held in the 12 months preceding interview corresponded to that occupation; UJ, the number of workers who reported that occupation for their usual job; CJ and UJ, the number of workers with the specified occupation as their current and usual jobs.

TABLE 5

Concordance of Current Job (CJ) and Usual Job (UJ) by Industry for Workers Who Worked Within the Past 12 Months: Detailed List of Industries

Industry	US Worker Estimated Population Size, CJ	Number of Workers			$\kappa \pm SE$	95% CI for $\kappa$
		CJ	UJ	CJ & UJ		
Petroleum and coal products manufacturing	190,876	20	17	15	85.8 $\pm$ 6.6	72.8–98.7
Mining (except oil and gas)	238,936	24	26	20	84.4 $\pm$ 5.9	72.7–96.1
Construction industries	10,627,902	1,098	1,114	932	82.0 $\pm$ 1.1	79.8–84.3
Textile product mills	209,492	25	31	21	81.4 $\pm$ 6.4	68.9–94.0
Personal services (barber shops, beauty salons, nail salons, laundry, funeral homes, and cemeteries)	2,546,227	291	276	230	80.8 $\pm$ 2.4	76.0–85.5
Forestry and logging	219,374	23	27	19	80.0 $\pm$ 7.2	65.8–94.1
Utilities industries	1,415,416	136	133	105	80.0 $\pm$ 3.2	73.8–86.3
Private households	1,046,315	153	136	117	79.5 $\pm$ 3.2	73.2–85.7
Crop production	952,417	114	114	88	78.8 $\pm$ 3.5	72.0–85.6
Paper manufacturing	394,405	43	47	36	78.4 $\pm$ 6.2	66.3–90.6
Education services industries	15,302,684	1,674	1,536	1,286	78.4 $\pm$ 1.0	76.5–80.4
Support activities for agriculture and forestry	299,875	38	38	28	77.4 $\pm$ 6.9	63.8–90.9
Hospitals	6,346,648	735	761	588	76.9 $\pm$ 1.4	74.0–79.7
Museum, historical sites, and similar institutions	435,674	49	49	38	76.7 $\pm$ 6.1	64.8–88.7
Motion picture and sound recording industries	534,443	59	74	49	76.5 $\pm$ 4.8	67.0–86.0
Securities, commodity contracts, and other financial investments and related activities	1,092,971	117	121	89	76.0 $\pm$ 3.7	68.8–83.2
Postal service, couriers, and messengers	1,492,304	170	175	133	75.6 $\pm$ 3.1	69.6–81.7
Repair and maintenance	2,039,360	216	216	165	74.6 $\pm$ 2.6	69.5–79.7
Transportation (including support activities for transportation)	4,058,292	463	468	351	74.3 $\pm$ 2.1	70.2–78.4
Primary metal manufacturing	554,051	56	66	45	74.1 $\pm$ 5.7	62.9–85.3
Merchant wholesalers, durable goods	2,073,827	199	194	144	74.1 $\pm$ 3.1	68.1–80.2
Professional, scientific, and technical services industries	10,329,376	1,121	1,028	819	74.1 $\pm$ 1.3	71.6–76.6
Chemical manufacturing	1,181,840	125	147	97	73.8 $\pm$ 3.3	67.4–80.2
Broadcasting and telecommunications	2,016,395	244	282	188	73.7 $\pm$ 2.8	68.2–79.3
Animal production	751,939	85	95	73	72.9 $\pm$ 5.9	61.4–84.5
Ambulatory health care services	6,986,771	831	751	595	72.7 $\pm$ 1.4	69.9–75.6
Public administration industries	7,652,456	893	868	661	72.7 $\pm$ 1.5	69.7–75.6



Industry	US Worker	Number of Workers				κ ± SE	95% CI for κ
	Estimated Population Size, Cj	Cj	Uj	Cj & Uj			
Information services and data processing	449,716	56	57	40	72.6 ± 5.5	61.8–83.3	
Beverage and tobacco product manufacturing	234,085	20	28	15	72.5 ± 7.6	57.5–87.4	
Warehousing and storage	492,589	60	56	45	72.5 ± 6.1	60.5–84.4	
Amusement, gambling, and recreation industries	1,936,046	210	207	153	72.4 ± 3.2	66.2–78.7	
Performing arts, spectator sports, and related industries	1,039,571	122	112	86	72.3 ± 3.8	64.8–79.7	
Food services and drinking places	9,332,980	1,026	1,192	834	72.2 ± 1.3	69.6–74.8	
Miscellaneous manufacturing	1,096,130	121	139	94	71.8 ± 3.7	64.6–79.1	
Support activities for mining	409,473	43	41	30	71.7 ± 6.6	58.7–84.8	
Lessors of nonfinancial intangible assets (except copyrighted works)	189,294	20	15	13	71.4 ± 10.8	50.1–92.8	
Real estate	2,383,680	281	258	197	71.2 ± 2.5	66.2–76.1	
Insurance carriers and related activities	2,347,521	268	265	184	71.0 ± 2.3	66.5–75.5	
Transportation equipment manufacturing	1,953,746	197	246	156	70.5 ± 3.0	64.6–76.4	
Clothing and clothing accessories stores	1,608,300	177	169	124	70.3 ± 3.7	63.0–77.6	
Health and personal care stores	1,166,117	114	114	82	69.9 ± 4.6	60.8–79.0	
Food manufacturing	1,928,083	232	230	165	69.4 ± 3.0	63.6–75.2	
Motor vehicle and parts dealers	1,995,419	192	199	139	69.4 ± 3.3	62.9–75.9	
Computer and electronic product manufacturing	1,172,254	126	172	102	69.3 ± 3.4	62.5–76.0	
Administrative and support and waste management and remediation services industries	6,813,062	821	668	520	69.0 ± 1.7	65.6–72.4	
Furniture and related product manufacturing	512,450	55	64	42	68.9 ± 5.5	58.0–79.8	
Nursing and residential care facilities	2,797,558	366	361	257	68.7 ± 2.5	63.8–73.6	
Printing and related support activities	768,841	85	113	70	68.6 ± 4.6	59.4–77.7	
Social assistance	3,995,856	488	419	322	68.4 ± 2.2	64.1–72.6	
Publishing industries (except Internet)	786,302	82	101	63	68.3 ± 4.9	58.7–77.9	
Fabricated metal product manufacturing	1,161,679	118	130	85	67.7 ± 3.9	60.0–75.4	
Religious, grant making, civic, labor, professional, and similar organizations	2,144,618	245	211	158	67.4 ± 3.0	61.4–73.4	
Merchant wholesalers, nondurable goods	1,570,487	176	191	122	66.6 ± 3.4	59.8–73.3	
Credit intermediation and related activities	1,008,246	117	134	82	66.2 ± 4.0	58.4–74.1	
Wood product manufacturing	467,839	45	53	32	66.0 ± 5.3	55.6–76.5	
Machinery manufacturing	1,022,236	107	128	76	65.8 ± 4.1	57.7–73.9	
Accommodation	1,333,691	177	191	121	65.7 ± 3.9	57.9–73.4	

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Industry	US Worker Estimated Population Size, CJ	Number of Workers			$\kappa \pm SE$	95% CI for $\kappa$
		CJ	UJ	CJ & UJ		
Food and beverage stores	3,057,918	329	384	235	64.4 $\pm$ 2.9	58.8–70.1
Miscellaneous store retailers	1,180,631	126	113	69	64.4 $\pm$ 4.5	55.4–73.3
Apparel manufacturing	258,204	30	49	23	64.0 $\pm$ 7.5	49.3–78.7
Electrical equipment, appliance, and component manufacturing	344,246	41	53	30	63.9 $\pm$ 6.5	51.2–76.6
Monetary authorities—central bank	1,875,747	219	246	151	63.5 $\pm$ 3.4	56.8–70.2
Nonstore retailers and nonspecified retail trade	1,032,711	109	99	70	63.2 $\pm$ 4.3	54.7–71.7
General merchandise stores	3,516,815	359	324	214	62.6 $\pm$ 2.6	57.5–67.8
Nonmetallic mineral product manufacturing	325,005	39	52	30	61.6 $\pm$ 7.3	47.2–76.0
Building material and garden equipment and supplies dealers	1,186,147	114	100	61	58.1 $\pm$ 4.7	48.9–67.4
Rental and leasing services	305,430	37	40	22	58.1 $\pm$ 8.3	41.8–74.4
Furniture and home furnishings stores	448,107	50	61	34	57.4 $\pm$ 6.6	44.4–70.4
Plastics and rubber products manufacturing	474,675	57	57	34	57.2 $\pm$ 6.4	44.6–69.9
Sporting goods, camera, hobby, book and music stores	849,636	81	88	48	56.9 $\pm$ 5.6	45.9–67.8
Gasoline stations	504,741	45	49	24	55.3 $\pm$ 7.6	40.3–70.4
Electronics and appliance stores	543,550	72	75	40	50.9 $\pm$ 5.6	39.9–61.9
Textile mills	122,877	16	27	11	44.1 $\pm$ 11.4	21.7–66.6

Corresponding Census codes may be found in the Appendix available at [ftp://ftp.cdc.gov/pub/HealthStatistics/NCHS/DatasetDocumentation/NHIS/2010/samadult\\_layout.pdf](ftp://ftp.cdc.gov/pub/HealthStatistics/NCHS/DatasetDocumentation/NHIS/2010/samadult_layout.pdf).

CI, confidence interval; CJ, the number of workers whose main job corresponded to the specified industry in the week preceding interview or, if not employed in the week preceding interview, whose main job held in the 12 months preceding interview corresponded to that industry; CJ and UJ, the number of workers with the specified industry as their current and usual jobs; SE, standard error; UJ, the number of workers who reported that industry for their usual job.

TABLE 6

Concordance of Current Job (CJ) and Usual Job (UJ) by Occupation for Workers Who Worked Within the Past 12 Months: Detailed List of Occupations

Occupation	US Worker Estimated Population Size, CJ	Number of Workers				$\kappa \pm SE$	95% CI for $\kappa$
		CJ	UJ	CJ and UJ			
Air transportation workers	245,605	28	27	24	89.8 $\pm$ 4.8	80.4–99.3	
Health diagnosing and treating practitioners	5,084,962	588	573	522	89.3 $\pm$ 1.1	87.2–91.5	
Social scientists and related workers	434,711	45	47	40	87.5 $\pm$ 4.2	79.3–95.7	
Lawyers, judges, and related workers	1,084,565	99	94	85	86.4 $\pm$ 3.6	79.3–93.4	
Art and design workers	1,118,590	129	130	113	86.1 $\pm$ 2.8	80.7–91.6	
Personal appearance workers	1,279,398	142	139	121	86.1 $\pm$ 2.9	80.4–91.7	
Supervisors, construction, and extraction workers	691,590	62	73	57	85.5 $\pm$ 3.6	78.4–92.7	
Architects, surveyors, and cartographers	274,658	27	32	25	85.2 $\pm$ 5.3	74.9–95.6	
Engineers	1,931,641	197	201	168	85.0 $\pm$ 2.3	80.4–89.6	
Computer specialists	3,920,120	433	437	370	84.9 $\pm$ 1.7	81.7–88.2	
Other transportation workers	296,349	36	36	29	84.7 $\pm$ 4.9	75.0–94.3	
Construction trades workers	7,175,940	754	753	641	83.6 $\pm$ 1.4	80.9–86.4	
Primary, secondary, and special education schoolteachers	5,968,531	611	587	496	82.5 $\pm$ 1.4	79.7–85.3	
Extraction workers	239,445	24	25	19	82.3 $\pm$ 5.7	71.1–93.5	
Life scientists	425,444	47	48	39	81.9 $\pm$ 4.9	72.3–91.5	
Textile, apparel, and furnishings workers	735,057	105	125	91	81.6 $\pm$ 3.3	75.2–88.0	
Entertainers and performers, sports and related workers	681,973	84	95	70	81.5 $\pm$ 3.4	74.9–88.2	
First-line supervisors/managers, protective service workers	317,167	34	32	25	81.3 $\pm$ 5.9	69.6–92.9	
Plant and system operators	316,338	29	28	22	80.9 $\pm$ 5.8	69.5–92.4	
Religious workers	626,875	58	46	40	79.5 $\pm$ 5.1	69.6–89.5	
Law enforcement workers	1,197,772	138	139	110	79.3 $\pm$ 3.5	72.4–86.3	
Supervisors of installation, maintenance, and repair workers	419,031	38	40	31	77.8 $\pm$ 6.3	65.5–90.1	
Health technologists and technicians	2,151,965	257	239	197	77.4 $\pm$ 2.4	72.7–82.2	
Material moving workers	3,740,051	411	414	314	77.0 $\pm$ 2.1	72.9–81.1	
Media and communication equipment workers	315,294	35	34	27	76.5 $\pm$ 7.1	62.5–90.4	
Nursing, psychiatric, and home health aides	2,237,860	299	294	230	76.5 $\pm$ 2.3	72.0–81.1	
Physical scientists	469,581	42	52	34	76.3 $\pm$ 5.4	65.7–86.8	

Occupation	US Worker Estimated Population Size, CJ	Number of Workers			κ ± SE	95% CI for κ
		CJ	UJ	CJ and UJ		
Postsecondary teachers	1,892,110	229	211	168	76.3 ± 2.8	70.7–81.8
Building cleaning and pest control workers	4,143,258	545	492	408	76.2 ± 1.9	72.3–80.0
Chief executives; general and operations managers; legislators	2,373,170	223	228	169	75.6 ± 2.7	70.3–80.9
Financial specialists	3,228,093	381	353	280	75.6 ± 2.1	71.4–79.8
Motor vehicle operators	3,952,242	441	390	323	75.4 ± 2.0	71.4–79.4
Counselors, social workers, and other community and social service specialists	2,124,713	266	246	197	75.1 ± 2.7	69.7–80.5
Legal support workers	720,394	92	89	67	75.1 ± 4.0	67.2–83.1
Secretaries and administrative assistants	3,111,149	369	376	278	75.0 ± 2.2	70.7–79.3
Firefighting and prevention workers	211,482	23	31	21	74.6 ± 7.6	59.6–89.5
Other management occupations	8,196,103	865	935	678	74.0 ± 1.4	71.3–76.8
Grounds maintenance workers	1,405,658	157	148	116	73.8 ± 3.7	66.5–81.0
Librarians, curators, and archivists	320,169	38	36	26	73.4 ± 6.5	60.6–86.2
Other installation, maintenance, and repair occupations	2,230,479	240	219	176	73.4 ± 2.9	67.8–79.1
Other construction and related workers	528,371	45	44	31	72.3 ± 6.0	60.4–84.2
Life, physical, and social science technicians	361,231	44	41	30	72.2 ± 6.7	59.1–85.3
Electrical and electronic equipment mechanics, installers, and repairers	797,861	93	93	69	72.1 ± 4.4	63.5–80.7
Drafters, engineering, and mapping technicians	722,871	71	64	48	71.7 ± 5.0	62.0–81.4
Vehicle and mobile equipment mechanics, installers, and repairers	1,767,971	181	192	141	71.3 ± 3.2	65.0–77.6
Food-processing workers	792,752	100	91	66	71.2 ± 4.3	62.7–79.7
Media and communication workers	1,098,864	123	133	92	71.1 ± 3.5	64.2–78.1
Animal care and service workers	359,776	29	27	19	70.7 ± 9.8	51.5–90.0
Food and beverage serving workers	3,908,458	398	445	290	70.5 ± 2.3	66.0–75.0
Financial clerks	3,186,127	377	397	276	70.2 ± 2.2	65.8–74.5
Other food preparation and serving-related workers	764,028	104	106	75	70.1 ± 4.7	60.8–79.4
Cooks and food preparation workers	3,139,226	375	388	286	69.9 ± 2.7	64.7–75.2
Sales representatives, services	1,921,484	202	188	133	69.8 ± 3.1	63.7–76.0
Metal workers and plastic workers	1,431,384	159	210	133	69.8 ± 3.2	63.5–76.1
Operations specialties managers	2,721,384	285	296	198	69.7 ± 2.5	64.8–74.5
Material recording, scheduling, dispatching, and distributing workers	3,860,139	414	385	286	69.6 ± 2.5	64.7–74.6
Agricultural workers	877,282	120	133	96	69.6 ± 5.2	59.5–79.8

Occupation	US Worker Estimated Population Size, CJ	Number of Workers			$\kappa \pm SE$	95% CI for $\kappa$
		CJ	UJ	CJ and UJ		
Other production occupations	3,159,117	358	391	266	69.5 $\pm$ 2.2	65.1–73.9
Other healthcare support occupations	1,442,599	171	154	118	69.3 $\pm$ 3.5	62.3–76.2
Supervisors, production workers	871,050	86	112	66	69.0 $\pm$ 4.1	61.0–77.0
Sales representatives, wholesale and manufacturing	1,259,993	127	141	92	68.8 $\pm$ 3.5	61.8–75.8
Business operations specialists	3,707,982	422	383	280	68.7 $\pm$ 2.2	64.4–72.9
Assemblers and fabricators	1,237,767	137	164	105	68.1 $\pm$ 3.8	60.6–75.5
Other education, training, and library occupations	1,275,128	137	118	87	68.0 $\pm$ 4.7	58.7–77.3
Supervisors, personal care and service workers	192,566	23	19	14	68.0 $\pm$ 9.4	49.5–86.5
Entertainment attendants and related workers	345,397	44	43	29	67.8 $\pm$ 7.4	53.2–82.4
Advertising, marketing, promotions, public relations, and sales managers	945,795	93	103	66	67.7 $\pm$ 4.6	58.6–76.9
Other office and administrative support workers	3,266,989	379	339	245	67.2 $\pm$ 2.4	62.4–72.0
Mathematical science occupations	194,318	21	19	14	67.1 $\pm$ 9.4	48.6–85.7
Other personal care and service workers	3,329,466	404	358	273	66.7 $\pm$ 2.6	61.5–71.9
Supervisors, sales workers	3,655,668	396	456	294	66.6 $\pm$ 2.2	62.3–70.9
Supervisors, food preparation, and serving workers	955,483	106	139	87	66.5 $\pm$ 4.1	58.4–74.6
Other teachers and instructors	929,299	98	94	62	66.2 $\pm$ 4.7	56.9–75.5
Retail sales workers	7,566,458	804	797	535	65.2 $\pm$ 1.9	61.5–68.8
Supervisors, office and administrative support workers	1,433,244	180	209	129	65.2 $\pm$ 3.2	59.0–71.4
Information and record clerks	5,239,254	628	627	406	63.8 $\pm$ 1.9	60.1–67.5
Supervisors, building and grounds cleaning and maintenance workers	435,806	45	46	29	63.7 $\pm$ 6.7	50.6–76.8
Other sales and related workers	1,637,385	186	145	111	63.5 $\pm$ 3.7	56.2–70.8
Printing workers	364,459	42	49	31	59.2 $\pm$ 7.3	44.8–73.5
Other protective service workers	1,186,221	148	117	80	58.2 $\pm$ 4.3	49.6–66.7
Supervisors, transportation and material moving workers	162,920	17	27	12	54.7 $\pm$ 10.0	35.0–74.3

Corresponding Census codes may be found in the Appendix available at [ftp://ftp.cdc.gov/pub/HealthStatistics/NCHS/Dataset Documentation/NHIS/2010/samadult\\_layout.pdf](ftp://ftp.cdc.gov/pub/HealthStatistics/NCHS/Dataset Documentation/NHIS/2010/samadult_layout.pdf).

CI, confidence interval; CJ, the number of workers whose main job corresponded to the specified occupation in the week preceding interview or, if not employed in the week preceding interview, whose main job held in the 12 months preceding interview corresponded to that occupation; CJ and UJ, the number of workers with the specified occupation as their current and usual jobs; UJ, the number of workers who reported that occupation for their usual job.

**TABLE 7**

Concordance of Current Job (CJ) and Usual Job (UJ) by US Occupational Classification and Sex–Race–Ethnicity–Age Groupings for Workers Who Worked Within the Past 12 Months

	White Collar	Service	Farming, Fishing, and Forestry	Blue Collar
US worker estimated population size	88,838,770	29,958,933	1,047,584	31,496,169
<i>n</i> (CJ, UJ, CJ and UJ)*	9792, 9753, 9037	3541, 3440, 2875	135, 153, 109	3421, 3543, 3025
$\kappa \pm \text{SE}$				
All	81.4 $\pm$ 0.6	76.5 $\pm$ 0.8	71.5 $\pm$ 4.5	83.1 $\pm$ 0.7
Male	82.8 $\pm$ 0.8	76.6 $\pm$ 1.2	72.2 $\pm$ 4.9	81.6 $\pm$ 0.8
Female	78.0 $\pm$ 1.0	75.8 $\pm$ 1.1	70.1 $\pm$ 8.8	78.0 $\pm$ 1.7
White	81.7 $\pm$ 0.7	76.3 $\pm$ 0.9	71.8 $\pm$ 4.7	83.4 $\pm$ 0.8
Black	78.7 $\pm$ 1.5	76.4 $\pm$ 1.9	–	80.2 $\pm$ 1.6
Other race	81.4 $\pm$ 2.3	76.4 $\pm$ 3.1	–	83.7 $\pm$ 2.5
Hispanic	87.5 $\pm$ 1.0	83.5 $\pm$ 1.3	82.6 $\pm$ 4.2	87.4 $\pm$ 1.1
Non-Hispanic	79.8 $\pm$ 0.7	74.7 $\pm$ 1.0	62.7 $\pm$ 6.8	81.9 $\pm$ 0.8
Age, y				
18–29	77.1 $\pm$ 1.3	74.9 $\pm$ 1.6	75.3 $\pm$ 9.8	83.6 $\pm$ 1.5
30–44	83.8 $\pm$ 0.9	77.6 $\pm$ 1.3	72.8 $\pm$ 5.2	85.1 $\pm$ 0.9
45–64	83.0 $\pm$ 0.9	76.6 $\pm$ 1.3	62.4 $\pm$ 8.2	82.4 $\pm$ 1.1
65+	73.2 $\pm$ 2.8	69.5 $\pm$ 3.7	–	70.3 $\pm$ 3.5

Ellipses show that estimates based on cell sizes of 10 or fewer are not shown.

CJ, the number of workers currently in the job; CJ and UJ, the number of workers currently in their usual job; UJ, the number of workers usually in the job; y, years.